

Issued by:

Cereal Disease Laboratory

U.S. Department of Agriculture Agricultural Research Service 1551 Lindig St, University of Minnesota St. Paul, MN 55108-6052 (612) 625-6299 FAX (651) 649-5054 Mark.Hughes@ars.usda.gov For the latest cereal rust news from the field, subscribe to the cereal-rust-survey listserv list. To subscribe, please visit: http://www.ars.usda.gov/Main/docs.htm?docid=9970

Or, send an email to: Mark.Hughes@ars.usda.gov

Reports from this list as well as all Cereal Rust Bulletins are maintained on the CDL website (http://www.ars.usda.gov/mwa/cdl)

- Wheat leaf rust generally light in Southern Plains and Gulf states.
- Wheat stripe rust active early in the Pacific Northwest.

For original, detailed reports from our cooperators and CDL staff, please visit the <u>Cereal Rust Situation</u> (CRS) reports page on the <u>CDL</u> website or click the <u>CRS</u> link found throughout the bulletin.

Extreme to abnormally high drought conditions exist throughout much of the Central and Southern Plains extending in to Louisiana and southern Arkansas (http://www.drought.unl.edu/dm/monitor.html).

Wheat stem rust. Not yet reported in the U.S. this year.

Wheat leaf rust.

Texas – Severe leaf rust was found on the cultivar Jackpot (Lr39/41) in commercial fields in two counties (Colorado and Jackson) southwest of Houston the first week of March. No leaf rust was found on the cultivar Fannin also grown in the fields. Fungicide was being applied in this area and further south. Generally, trace to low levels of wheat leaf rust were found in plots in southeastern and south central Texas in early March (see <u>CRS</u>).

Oklahoma – Traces of active sporulating leaf rust were noted in a strip of Jagalene (Lr24) in a nursery at Stillwater (north central Oklahoma) in early March. By the end of March, the wheat leaf rust had increased only slightly. No rust samples had been received at the Oklahoma State diagnostic lab by late March from western and southwestern Oklahoma where drought conditions are more severe (see <u>CRS</u>).

Kansas – Trace amounts of overwintering leaf rust were found in plots near Manhattan (northeast Kansas) in mid-March.

Louisiana – Leaf rust was actively increasing, but at relatively low levels in plots throughout the state on March 25 (see <u>CRS</u>). No reports of rust issues in commercial fields were yet reported by March 27.

Arkansas – Heavy amounts of leaf rust were found in a 120 acre field of Jackpot grown for seed in central Arkansas in mid-March. This was the only known leaf rust in the state by 3/22.

Georgia – Wheat leaf rust was found in early planted plots and had spread to susceptible plots in Plains (west central Georgia) by early March.

Washington – A few leaves with wheat leaf rust pustules were found in a field in south central Washington in mid-March.



Wheat cultivar *Lr* gene postulation database. *Please visit*: <u>Leaf rust resistance gene postulation in current U.S.</u> wheat cultivars.

Wheat stripe rust.

Texas - Stripe rust was found in south central Texas plots on March 8.

Louisiana – Stripe rust was found at very low levels in very susceptible plots at Winnsboro (northeastern Louisiana) on March 3. By late March the stripe rust was very active in the plots. Some lines and several commercial cultivars heavily infected in 2010 are clean this year while some lines and cultivars that were clean in 2010 are susceptible this year (see CRS). This suggests perhaps a population change in the area.

Washington – Generally, stripe rust was active much earlier in 2011 than 2010 throughout the Pacific Northwest with active sporulation noted in areas in Washington and Oregon in mid-February. Despite the cold weather in late February, stripe rust was active in mid-March in many fields in southeastern and central Washington (see <u>CRS</u>).

Please send wheat and barley stripe rust collections (5 or more rusted green leaves) as soon as possible after collection to:

Dr. Xianming Chen USDA-ARS 361 Johnson Hall P.O. Box 646430 Washington State University Pullman, WA 99164-6430 email: xianming@wsu.edu

Note: Stripe rust collections are vulnerable to heat and do not survive long at warm temperatures; therefore, if shipment of collections for race identification is delayed their viability will be greatly reduced. An overnight courier service is preferred for sending stripe rust collections.

Oat stem rust. Not yet reported in the U.S. this year.

Oat Crown Rust

Oat crown rust was found in a plot of Nora in south central Texas the second week in March. By late March, low severities were also found on Walken and HG76-30 plots in the same nursery.

Barley stem rust. Not yet reported in the U.S. this year.

Barley leaf rust. Not yet reported in the U.S. this year.

Barley stripe rust. Not yet reported in the U.S. this year.

Rye stem or leaf rust. Not yet reported in the U.S. this year.



Please Note: Cereal rust situation reports

Cereal Rust Bulletins are distributed every two weeks on average during the season - for the most timely cereal rust situation reports, subscribe to the cereal rust survey listserv list*. Instructions can be found at:

http://www.lsoft.com/scripts/wl.exe?SL1=CEREAL-RUST-SURVEY&H=LISTS.UMN.EDU

Or, if you prefer, simply send a message to Mark Hughes (<u>Mark.Hughes@ars.usda.gov</u>) to be added to the list. Messages from the list are maintained on the CDL website (http://www.ars.usda.gov/Main/docs.htm?docid=9757).

If you have information on the cereal rust situation (or other small grain diseases) in your area that you would care to share, please email your observations to:

Mark Hughes (Mark. Hughes@ars.usda.gov)

Or to: CEREAL-RUST-SURVEY@LISTS.UMN.EDU

We would like to include your name and email address so others can contact you. If, however, you prefer not having your name or email address appear with the information, please let us know when submitting your observations.

Information of most importance

We welcome any information you can provide, but are particularly interested in:

- Location (state, county, etc.)
- Rust (leaf rust, stem rust, stripe rust)
- Host (wheat, oat, etc.)
- Cultivar or line name if known
- Severity and prevalence
- Growth stage -when rust likely arrived, when infection first noted and current stage
- Where rust is found on the plants, e.g., lower leaves, flag leaf, etc.

Rust collections

Reports on the distribution of races of cereal rust fungi are an important part of our surveys. We regularly collect and test isolates of stem rust (wheat, oat, and barley), wheat leaf rust, and oat crown rust. We appreciate receiving collections of these rusts from cooperators around the U.S. If you can provide samples, please contact Mark Hughes (Mark.Hughes@ars.usda.gov) and he will send you a packet of collection envelopes and forms.

Cooperators page

For more information, which may be of interest, please visit our <u>Cooperator's page</u>.

* The sole purpose of the Cereal Rust Survey listserv list is to provide a format for cereal researchers, extension personnel and others to share observations of cereal rusts and other cereal diseases. We make no warranty about any information shared on this listserv or its utility or applicability. Mention of any product, brand, or trademark does not imply endorsement or recommendation of that product, brand, or trademark by USDA-ARS, or any of the participants on this listserv. By enrolling on this listserv list, participants understand and agree to abide by these conditions.

